

In the Specification

Amend the specification as follows:

Amend the paragraph beginning at page 8 paragraph [0034] and replace it with the following paragraph:

Once the transformation layer is provided over the second layer of the single crystal substrate, the structure is patterned to form a plurality of bi-layer stacks (14, 16) of different sizes whereby each bi-layer stack comprises the second layer of the single crystal substrate and the transformation layer. The plurality of different sized bilayer stacks are then three dimensionally oxidized using an oxidizing agent to concentrate the second material of the transformation layer into a plurality of island structures (51, 52). In accordance with the invention, the oxidizing agent may include, but is not limited to, oxygen, nitrogen, fluorine, chlorine, silicon bromide, sulfur and the like. During this three dimensional oxidation process, the transformation layer (16) is consumed while sides of the second layer (14) of the single crystal substrate are oxidized to provide a layer (40) entirely over the plurality of different sized island structures. This layer may be a grown layer or a deposited layer that reacts with the transformation layer. As a result, each of the plurality of different sized island structures (51, 52) are in exact crystalline registry with the underlying first substrate layer (10), whereby each island structure has a different concentration of the second material of the transformation layer and a different lattice parameter that are both dependent upon the initial size of the bi-layer stack (14, 16) from which each island structure (51, 52) is fabricated.

Amend the paragraph beginning at page 12 paragraph [0051] and replace it with the following paragraph:

Advantageously, this enables knowing in advance that a magnification within a medium to high magnification range, preferably a range from about 5000X to about 200,000X, can be calibrated to have this desired fringe spacing. That is, the invention enables the fabrication of a series of different sized crystalline pairs on a single sample, whereby the d-spacing difference between these pairs will generate Moire fringes of correct spacings to optimally calibrate the magnification settings of ~~an~~a TEM in the magnification range of 5000X to 200,000X. Therefore, the lattice parameter and the inter-planar d-spacings of a given embedded SGOI island in the resultant structure depend on the size of the patterned bi-layer and the germanium concentration in the starting SiGe layer 16.